

## REMARKS

### A. 35 U.S.C. § 102(b)

#### 1. Claims 16, 18, 20 and 21

In the Office Action of February 14, 2007, claims 16, 18, 20 and 21 were rejected under 35 U.S.C. § 102(b) as being anticipated by Gantz et al. Applicant traverses the rejection. In particular, claim 16 recites an evaluation module that includes “a first module for determining angular inclinations of said scanning device with respect to said linear measuring direction from several measured position values.” The Examiner at page 3 of the Office Action asserts that the digital interpolator described at column 6, lines 8-10 and 24-27 discloses the recited first module. The passage is silent as to determining angular angulations of a scanning device “from several measured position values.” At best Gantz et al. discloses angular measurements based on the count of pulses between the image of a marker 24 and an edge 107. Since there is no use of measured position values to determine an angular inclination of a scanning device in Gantz et al., claim 16 and its dependent claims 18, 20 and 21 are not anticipated by Gantz et al.

Claim 16 is not anticipated by Gantz et al. for the additional reason that Gantz et al. fails to disclose an evaluation module that includes a second module that determines “a value for a chronological progression of several angular inclinations.” The Examiner at page 3 of the Office Action asserts that the description at column 12, lines 63-65 and column 13, lines 4-7 discloses the recited second module. However, the description describes that only a single angular value, i.e., and interpolation value is measured as the accurate value by counting of pulses, wherein the number of counted pulses is a measurement of the angular value. Since a chronological progression of several angular inclinations is not determined, claim 16 and its dependent claims 18, 20 and 21 are not anticipated by Gantz et al.

Claim 18 is not anticipated for the additional reason that Gantz et al. fails to disclose two scanning points for scanning the at least one linear scale. The Examiner at page 3 of the Office Action asserts that the description at column 12, lines 68 and 75 discloses the recited two scanning points. However, the description describes a scanning member passing start and stop positions. There is no mention that there are two scanning points. Accordingly, claim 18 is not anticipated by Gantz et al. Despite the impropriety of the rejection, claim 18 is being amended to clarify that the recited two scanning points simultaneously scan the at least one linear scale to form the measured position values. Gantz et al. clearly does not disclose such a pair of scanning points and so the rejection should be withdrawn.

Claim 18 is not anticipated by Gantz et al. for the additional reason that Gantz et al. only generates a single measured position value and so fails to generate a value for a chronological progression of angular inclinations.

Note that claims 16 and 18 are being amended solely to clarify the operation of their recited systems. Since the amendments do not change the intended meaning or scope of the previous versions of the claims, the amendments are not being made for reasons related to patentability as defined in *Festo Corporation v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd.*, 234 F.3d 558, 56 USPQ2d 1865 (Fed. Cir. 2000) (*en banc*), *overruled in part*, 535 U.S. 722 (2002).

## 2. Claim 24

Claim 24 was rejected under 35 U.S.C. § 102(b) as being anticipated by Gantz et al. Applicant traverses the rejection. In particular, claim 24 recites “detecting several angular inclinations of said scanning device in relation to said linear measuring direction of said at least one linear scale by detecting position measurements of said scanning device at several scanning points.” The Examiner at page 4 of the Office Action asserts that the passage at column 4, lines

69-73 discloses the recited “detecting” process. The passage is silent as to detecting several angular angulations of a scanning device “by detecting position measurements of said scanning device at several scanning points.” As explained above in Section A.1, Gantz et al. discloses angular measurements based on the count of pulses between the image of a marker 24 and an edge 107. Since there is no use of position measurements to determine an angular inclination of a scanning device in Gantz et al., claim 24 is not anticipated by Gantz et al.

Claim 24 is not anticipated by Gantz et al. for the additional reason that Gantz et al. fails to disclose “determining a value for a chronological progression of a change in angular inclinations of said scanning device from said detected several angular inclinations of said scanning device.” The Examiner at page 4 of the Office Action asserts that the description at column 13, lines 4-7 discloses the recited “determining.” As explained above in Section A.1, Gantz et al. discloses only a single angular value, i.e., and interpolation value is measured as the accurate value by counting of pulses, wherein the number of counted pulses is a measurement of the angular value. Since a chronological progression of several angular inclinations is not determined, claim 24 is not anticipated by Gantz et al.

### **3. Claim 26**

Claim 26 was rejected under 35 U.S.C. § 102(b) as being anticipated by Gantz et al. Applicant traverses the rejection. In particular, claim 26 recites “detecting several angular inclinations of said scanning device in relation to said linear measuring direction of said at least one linear scale by detecting position measurements of said scanning device at several scanning points.” As explained above in Section A.2, the recited “detecting” is not anticipated by Gantz et al. and so the rejection is improper and should be withdrawn.

Claim 26 is not anticipated for the additional reason that Gantz et al. does not disclose the

recited “determining a value for a chronological progression of a change in angular inclinations of said scanning device from said detected several angular inclinations of said scanning device” as explained above in Section A.2.

The rejection of claim 26 is improper for the additional reason that Gantz et al. fails to disclose the process of “issuing to a user a numerical value representative of said determined value for said chronological progression of said change in angular inclinations of said scanning device.” The Examiner at page 5 of the Office Action asserts that the passage at column 19, lines 32-37 discloses the recited “issuing” process. The passage discloses displaying “the proper number representing the millimeters digit” regarding a position value of unit 23 along a measuring direction of a scale. The passage and the rest of Gantz et al. is silent as to issuing to a user a numerical value representative of a chronological progression of a change in angular inclination of a scanning device. Accordingly, claim 26 is not anticipated by Gantz et al. for this reason as well.

#### **4. Claim 27**

Claim 27 was rejected under 35 U.S.C. § 102(b) as being anticipated by Gantz et al. Applicant traverses the rejection. In particular, claim 27 recites “detecting several angular inclinations of said scanning device in relation to said linear measuring direction of said at least one linear scale by detecting position measurements of said scanning device at several scanning points.” This language is also used in claim 26. As explained above in Section A.3, the recited “detecting” is not anticipated by Gantz et al. and so the rejection is improper and should be withdrawn.

Claim 27 is not anticipated for the additional reason that Gantz et al. does not disclose the recited “determining a value for a chronological progression of a change in angular inclinations of said scanning device from said detected several angular inclinations of said scanning device.”

This language is also used in claim 26. As explained above in Section A.3, the recited “determining” is not anticipated by Gantz et al. and so the rejection is improper and should be withdrawn.

The rejection of claim 27 is improper for the additional reason that Gantz et al. fails to disclose the process of “graphically representing said determined value for said chronological progression of said change in angular inclinations of said scanning device.” The Examiner at page 6 of the Office Action asserts that the passage at column 19, lines 32-37 discloses the recited “graphically representing” process. As explained above in Section A.3, the passage and the rest of Gantz et al. is silent as to graphically representing a determined value for a chronological progression of a change in angular inclination of a scanning device. Accordingly, claim 27 is not anticipated by Gantz et al. for this reason as well.

**B. Claims 2-15, 17, 19, 22, 23 and 29-54**

Applicant notes with appreciation that claims 2-15, 17, 19, 22, 23 and 29-54 have been indicated to contain allowable subject matter. It is noted that the Office Action contains statements of reasons for the allowance of claims 2-4, 17, 22, 23, 29-32 and 42-44. Applicant traverses the statements in that there are other and broader reasons for the allowance of the claims.

**C. New Claims 55-58**

Note that claims 55-58 have been added solely to provide additional coverage for the systems and methods of claims 16, 24, 26 and 27, respectively, and so the claims are being presented for reasons not related to patentability as defined in *Festo*.

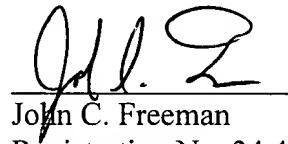
Note that the claims are not anticipated by Gantz et al. since Gantz et al. does not disclose a scanning device that scans by either of the principles of diffractive scanning, magnetic scanning

or capacitive scanning.

## CONCLUSION

In view of the arguments above, Applicant respectfully submits that all of the pending claims 2-24, 26, 27 and 29-58 are in condition for allowance and seek an early allowance thereof. If for any reason, the Examiner is unable to allow the application in the next Office Action and believes that an interview would be helpful to resolve any remaining issues, he is respectfully requested to contact the undersigned attorneys at (312) 321-4200.

Respectfully submitted,



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